# Service Bulletin 21

**Product:** Centormail

**Subject:** Diagnosing printing issues

**Date:** **2014-12-10**

To make it simpler for technicians to diagnose possible printing problems on Centormail, we have created a checklist . This will assist in the analysis of problems and improve the general understanding of the steps necessary to correct printing issues. The images provided are intended to help when filling out the checklist.

## Additional information

"Printing problems checklist" (attached)

# PRINTER PROBLEMS CHECKLIST

| | | | |
|---|---|---|---|
| **1 WHAT PRINT ERROR IS VISIBLE?** | | | |
| E | S | … Irregular unprinted streaks (Fig 1) | Possible causes: Soiled cartridge (ex. accumulated ink on the RDS spray shield, Fig 4), insufficient ink supply (-> empty cartridge), soiled print window (Fig 5) |
| E | S | … Straight unprinted streaks (Bild 3) | Possible causes: Soiled PDB contacts, soiled print window |
| E | S | … Comet-like unprinted gaps or streaks (Bild 2) | Possible causes: insufficient ink supply, soiled RDS (Fig 6) |
| E | S | … Partially blurred prints on thin envelopes (labels) | Possible cause: One or more clamping elements provide insufficient pressure (Fig 10) |
| E | S | … Contact error | Possible causes: CP-Chip is not straight (Fig 9), CP-Chip defect |
| E | S | … Left | Print error occurs with the left cartridge |
| E | S | … Right | Print error occurs with the right cartridge |
| **2 DOES THE AFFECTED SYSTEM USE HOSE-CARTRIDGES?** | | | |
| E | S | … yes | Carry out additional steps |
| E | S | … no | Carry out only steps 5, 6, 7, 8 |
| **3 ARE THE HOSES CORRECTLY CONNECTED TO THE CARTRIDGES?** | | | |
| | S | … yes | Carry out additional steps |
| | S | … no | Replace cartridge |
| **4 CONTACT ERROR: IS THE CP-CHIP STRAIGHT?** | | | |
| E | S | … yes | If the CP-Chip is soiled with old ink, clean it and the contacts with the PDB-board. If that does not remedy the problem: CP-Chip is probably defective. Replace cartridge |
| E | S | … no | Replace cartridge |

# PRINTER PROBLEMS CHECKLIST

| | | | | | |
|---|---|---|---|---|---|
| **5 WHAT DO THE CARTRIDGES WEIGH?** | | | | | |
| Cartridges can be weighed with the Centor-system internal scale or another letter scale | | | | | |
| E | S | Left cartridge:_____g | | | Right cartridge: _____g |
| **5.1 Single cartridge** | | | | | |
| E | | … L | … R | under 80 g | Cartridge empty, must be replaced |
| E | | … L | … R | between 80 g and 85 g | Cartridge level critical, replace if necessary |
| E | | … L | … R | over 85 g | Cartridge okay: new cartridges weigh 115 g. |
| **5.2 Hose-cartridge** | | | | | |
| | S | … L | … R | under 110 g | Cartridge empty, must be replaced |
| | S | … L | … R | between 110 g und 115 g | Cartridge level critical, replace if necessary |
| | S | … L | … R | over 115 g | Cartridge okay: optimal weight is 125 g or more |

| | | | |
|---|---|---|---|
| **6 CAN EXCESS INK TRACES BE FOUND ON THE CARTRIDGE?** | | | |
| E | S | … clear signs of ink on the ink jet surface (Fig 8) | Clean print heads by hand (refer to operating manual) |
| E | S | … clear signs of dirt on the cartridge contacts (Fig 7) | Clean cartridge and PDB contacts |

| | | | |
|---|---|---|---|
| **7 HOW MUCH AIR IS IN THE INKING SYSTEM HOSES?** | | | |
| **7.1** | | **BETWEEN TANK AND PRESSURE REGULATOR** | |
| | S | … none | Okay |
| | S | … up to 1.5 cm | Okay, prime system to be sure |
| | S | … over 1.5 cm | System must be primed |
| **7.2** | | **BETWEEN PRESSURE REGULATOR AND CONNECTOR** | |
| | S | … none | Okay |
| | S | … up to approx. 2 cm | Okay, slowly prime system to be sure |
| | S | … over 2 cm | System must be primed |
| **7.3** | | **BETWEEN CONNECTOR AND CARTRIDGE** | |
| | S | … none | Okay |
| | S | … up to approx. 3 cm | Okay |
| | S | … over 3 cm | Replace cartridges |

| | | | |
|---|---|---|---|
| **8 WHAT KIND OF INK BUILD-UPS CAN BE SEEN ON THE RDS?** | | | |
| E | S | … significant ink build-up on the spray shield | Clean the spray shield |
| E | S | … significant build-up on the sealing caps | replace RDS (refer to Service Manual) |
| E | S | … significant build up on the wiper blades | replace RDS (refer to Service Manual) |

| | | | |
|---|---|---|---|
| **9 HOW MUCH EXCESS INK CAN BE SEEN ON THE PRINT WINDOW?** | | | |
| E | S | … significant build-ups | clean the print window |
| E | S | … minimal build-ups | Okay, clean to be sure |

# PRINTER PROBLEMS CHECKLIST

| 10 | ARE THE PRESSURE REGULATORS OF THE INKING SYSTEM CLEAR? | |
|---|---|---|
| | Use the priming device to test ink flow for both hose connections. Test in the same way the priming process is performed according to the Service Manual; ink quantity to be drawn: maximum 5 ml per hose connection. | |
| | **S** … It is possible to draw ink | Okay |
| | **S** … It is NOT possible to draw ink | Replace tank system |

**S** Hose cartridges

**E** Single cartridges

# PRINTER PROBLEMS CHECKLIST

**Fig 1: irregular unprinted streaks**

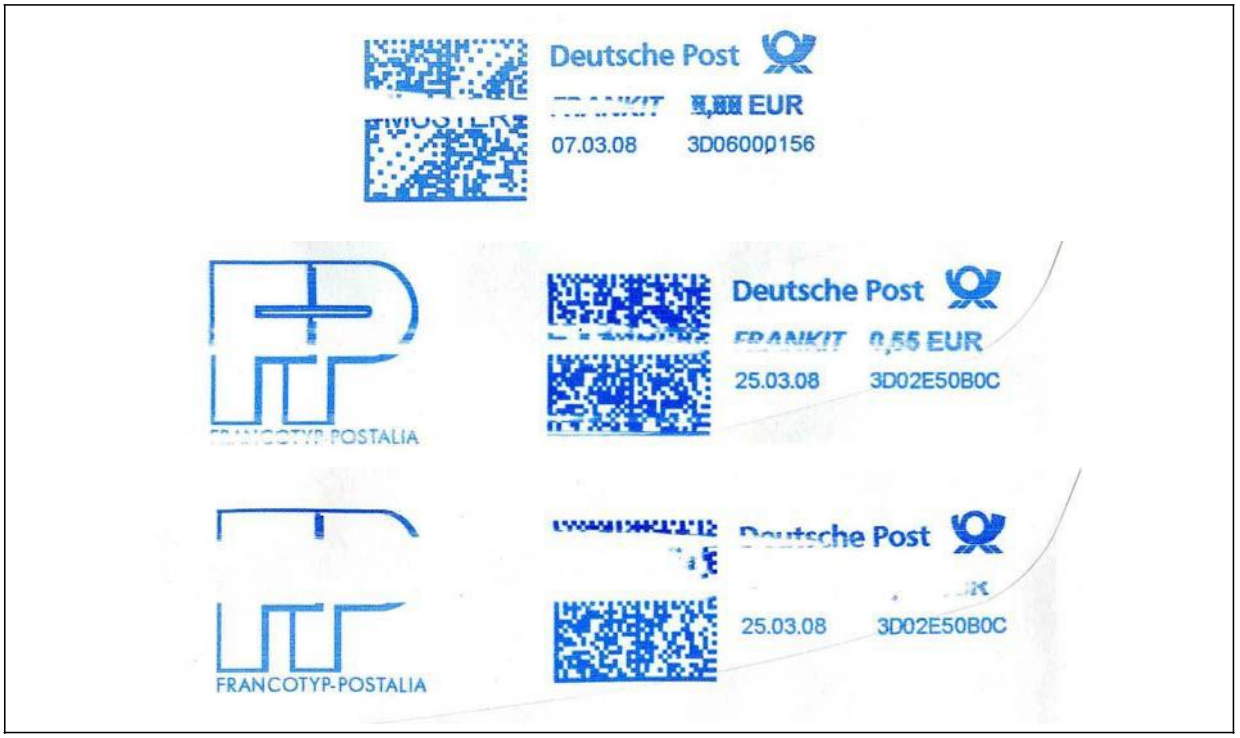


**Bild 2: comet-shaped unprinted streaks or gaps**

**Bild 3: straight unprinted streaks**

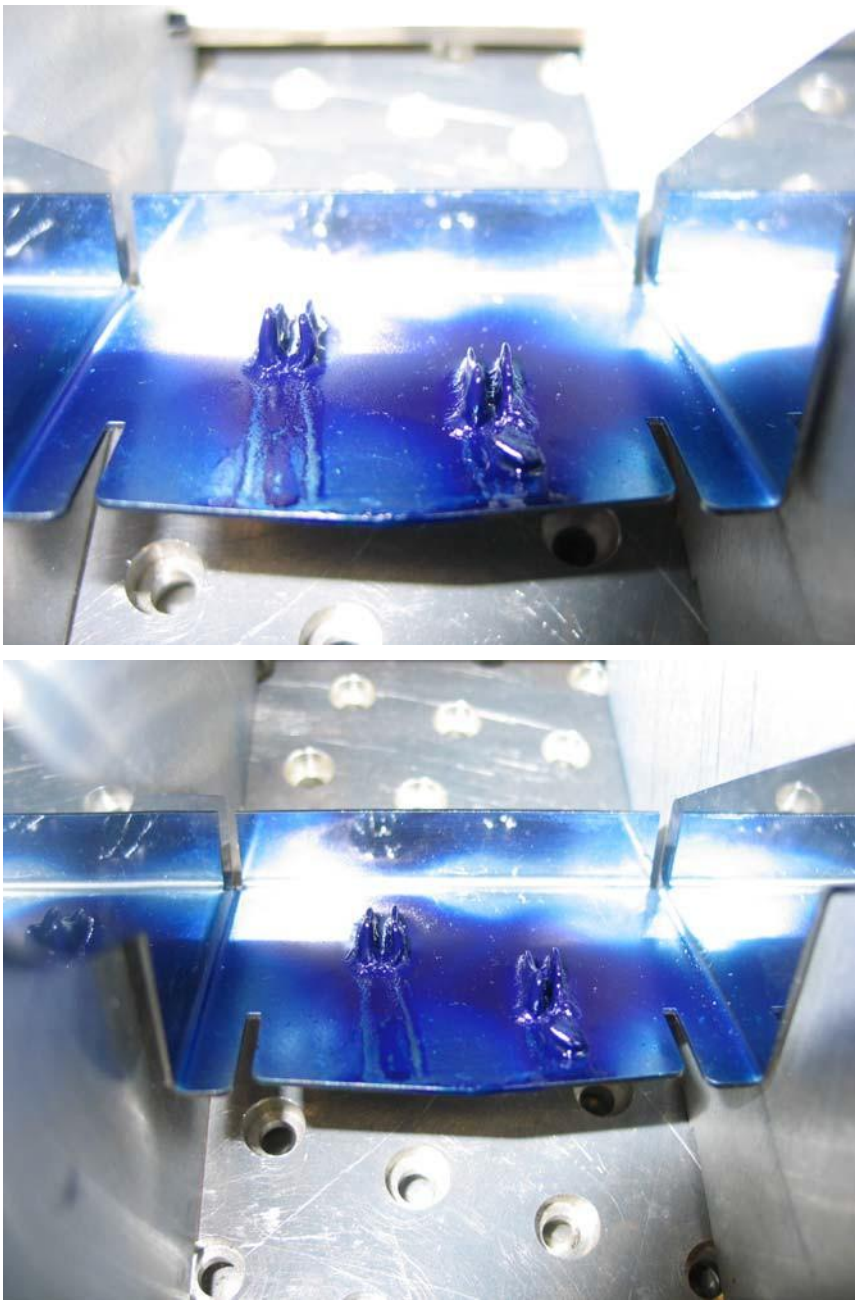

**Fig 4: Ink build-ups on the spray shield**

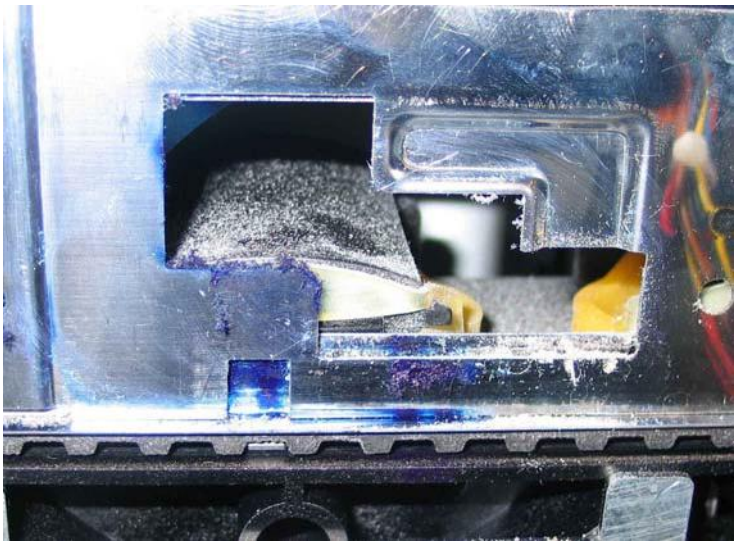

**Fig 5: Soiled print window**

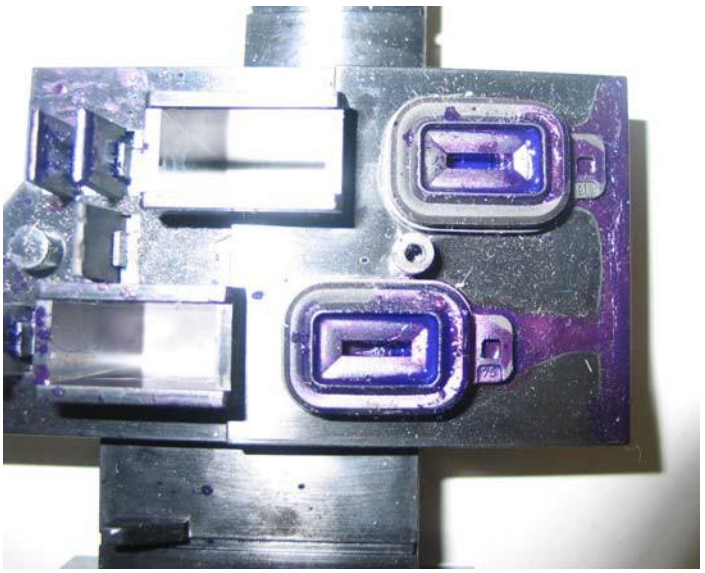

**Fig 6: Soiled RDS**

**Fig 7: Soiled contacts on the cartridges**

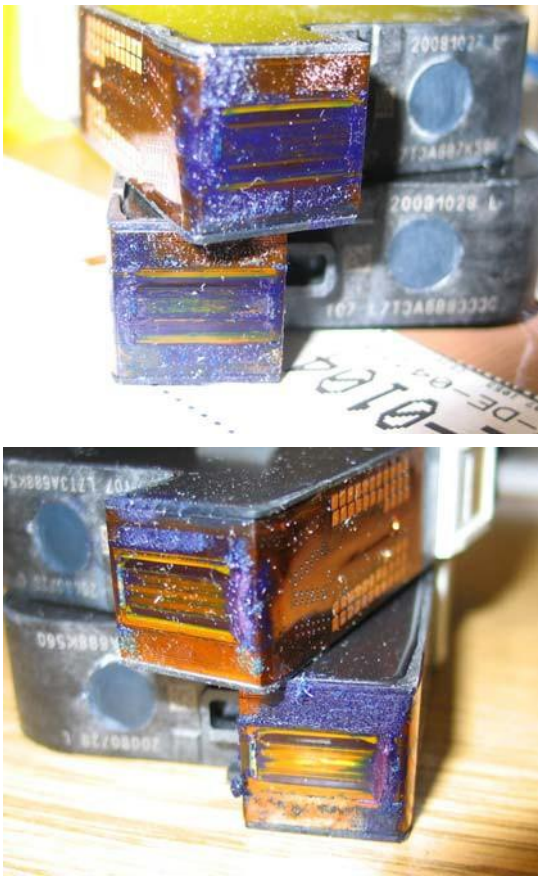

**Fig 8: Soiled ink jet surface on the cartridges**

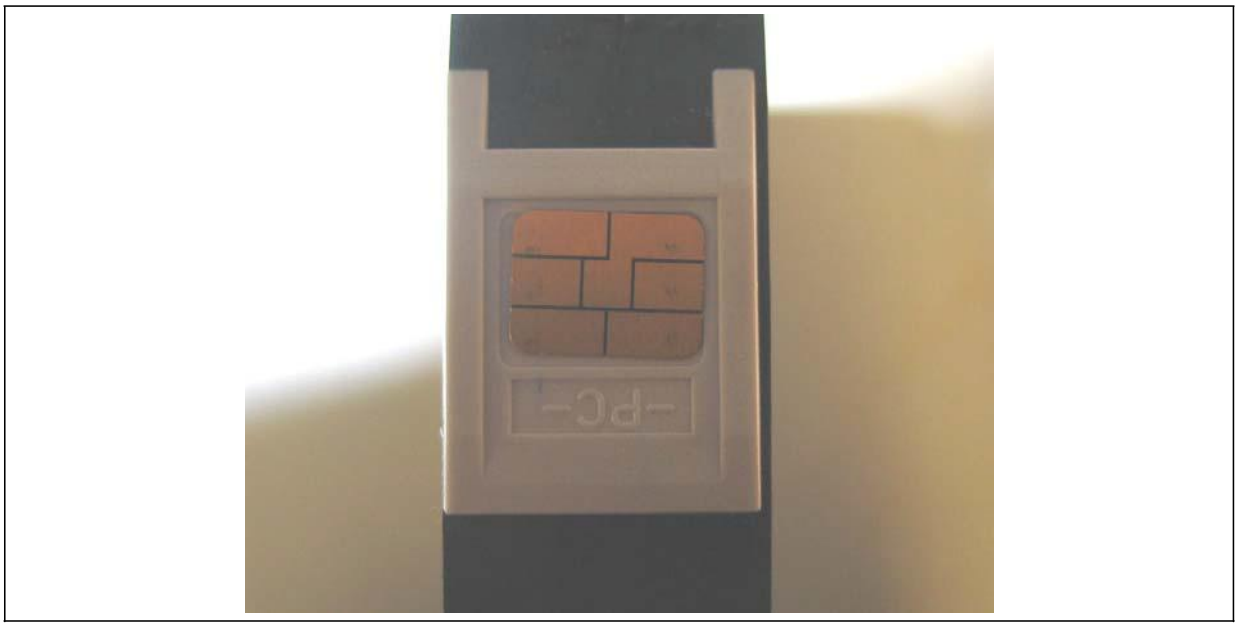

Fig 9: CP-Chip is not straight

Fig 10: Clamping elements apply insufficient pressure to the envelope